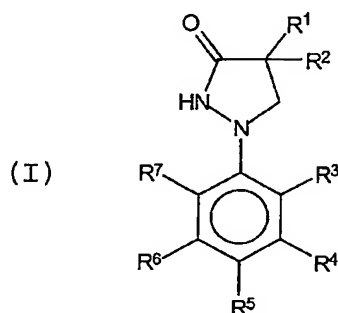
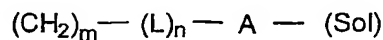


WHAT IS CLAIMED IS

1. An aqueous developer concentrate for the black and white development of silver halide photographic materials, without hydroquinone, comprising hydroquinonesulfonic acid or one of its salts as main developer of silver halides, characterized in that
- a) it comprises as co-developer a mixture comprised of 4-methyl-4-hydroxymethyl-1-phenyl-3-pyrazolidone and at least one 3-pyrazolidone type co-developer of formula (I),
 - b) the concentration of 4-methyl-4-hydroxymethyl-1-phenyl-3-pyrazolidone being lower than the solubility of 4-methyl-4-hydroxymethyl-1-phenyl-3-pyrazolidone measured at 18°C in a developer with composition similar to said developer concentrate but not comprising a co-developer, and
 - c) the quantity of 3-pyrazolidone type co-developers of formula (I) being between 2 and 60 mole percent in relation to the total quantity of co-developers, the 3-pyrazolidone type co-developer of formula (I) being:



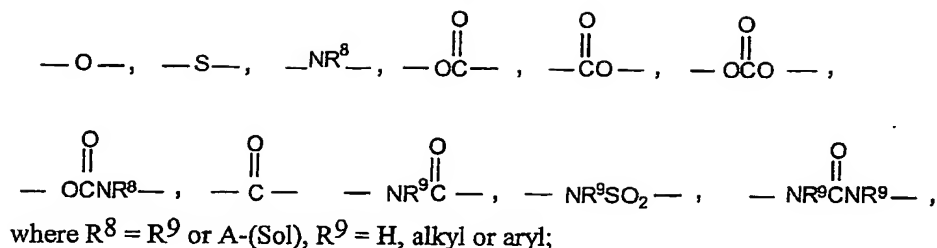
where R¹ and R² each independently represents hydrogen, a substituted or unsubstituted alkyl group, or a group represented by the formula:



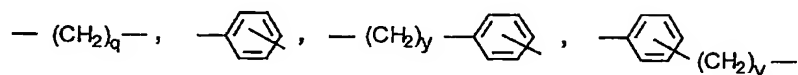
where m is between 0 and 5 and n is 0 or 1,

L represents a divalent group selected from among

23



A represents a divalent group selected from among

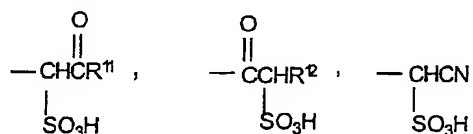


5

where q is between 0 and 5, and y is between 1 and 3;

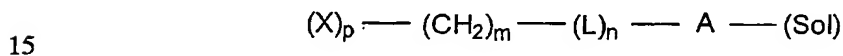
(Sol) is a solubilizing group selected from among:

CO₂H, SO₃H, SO₃K, NHSO₂R¹⁰, SO₂NH₂, SO₂NHR¹⁰, polyhydroxyalkyl,



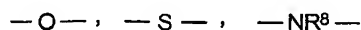
10 where R¹⁰ is alkyl or aryl, R¹¹ is OH, alkyl or aryl and R¹² is hydrogen, alkyl or aryl;

R³ to R⁷ in formula (I) each independently represents hydrogen, an alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted aryloxy group, or a group represented by the formula:



where p = 0 or 1;

X represents a divalent group selected from among



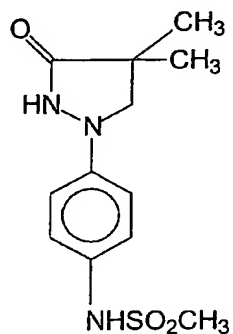
m, L, n, A, (Sol) and R⁸ are as defined above

20

with the further proviso that at least one of the radicals R¹ to R⁷ must contain a (Sol) group.

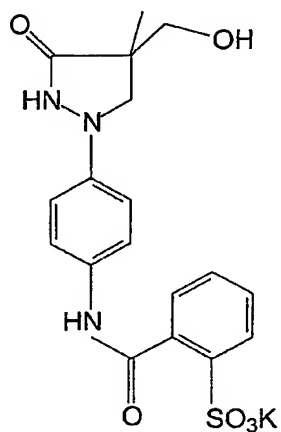
2. The developer concentrate of claim 1, wherein the main developer is potassium hydroquinone-monosulfonate.

5 3. The developer concentrate of claim 1, wherein the co-developer (I) is



4. The developer concentrate of claim 1, wherein the co-developer (I) is

10



5. A working strength developing solution obtainable by dilution of the developer concentrate according to Claim 1.

15

6. A photographic development method comprising contacting an exposed photographic material with a developer solution capable obtainable by dilution of the developer concentrate according to Claim 1.